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ABSTRACT

This guide was developed to empower individuals and organizations to solve social and educational problems. It is intended for use by anyone interested in leading groups in developing programs to improve education. The principles and methods that it contains are based on psychological theory and research, and it is intended to stimulate effective action by educational leaders and community organizations. It explains the Program Development Evaluation method, which assists individuals as they develop programs, thus enabling these persons to take advantage of a structure that will help them make useful plans to manage program adoption. The steps it contains encourage needs assessment, and they focus attention on problems that have been ignored so as to help mobilize action. The steps provide a structure to focus problem-solving efforts, using principles from group psychology and the psychology of motivation to overcome obstacles to change. The steps emphasize solutions to problems and promote realism in designating and following up on plans. The document is divided into seven modules: (1) a framework for actions; (2) formulating problem statements and goal statements; (3) preparing action statements; (4) setting objectives; (5) designing the program; (6) implementation standards; and (7) analyzing the force field. A glossary of program-development evaluation terms is included. Contains 10 references. (RJM)

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ED 429 363

Program Development and Evaluation for Schools and Communities

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Program Development and Evaluation for Schools and Communities

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Preface

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Références

Rationale and uses of this self-study guide

This guide was developed to help individuals and organizations become more powerful in solving social and educational problems. The principles and methods you will learn by engaging in the activities in this manual are based on psychological theory and research — and on the logic of program development and evaluation.

This book is intended to stimulate effective action by educational leaders and community organizations. The steps you will take by engaging in the activities presented here stimulate action to solve problems in several ways:

- They encourage the examination of information about needs to focus attention on problems that have been ignored and to help mobilize action.
- They provide a structure to focus problem-solving efforts, encourage a logical and productive sequence of activities, and increase the effectiveness of planning.
- They use principles from group psychology and the psychology of motivation to overcome obstacles to change and to direct and sustain productive problem-solving activity.
- They focus attention on solutions to problems that are within the grasp of an organization or group so that the sheer magnitude of difficult problems does not overwhelm the impulse to action.
- They promote realism in designating and following up on plans that will make a difference in levels of the problem when implemented.

How schools and communities can work together using this guide

This guide is not intended to be read; it is intended to be ***used***.

Anyone -- an educational leader, a business person, a citizen -- can use this guide as a foundation for leading groups in developing programs. This guide is intended to provide the scaffolding necessary to do productive planning. At the same time, few individuals possess all of the knowledge, skill, and experience to lead program development without additional help.

Users of this guide should make use of additional resources or help at various junctures. For example, selecting effective program components should be based at least in part on information about the range of options available and on information about how well they have worked to achieve similar aims in similar situations in the past. Library work or the use of content consultants are useful in making program decisions.

The use of process consultation experts can also be valuable. Beware that most consultants may not be trained or experienced in using all aspects of the program development and evaluation structure in this guide. To prepare for providing process consultation, experts should at the very least have carefully read the documents cited at the end of this section.

Whether your group seeks expert assistance or decides to go it alone, you should follow each part of the guidance provided in this guide carefully. Do not assume that you can skip or alter any part of the process without jeopardizing your program's success. Experience shows that all parts of the process described here are important.

Allow sufficient time to work through the steps laid out in this manual. Expect to conduct one step at a time, perhaps in full-day meetings scheduled a week or more apart. Do not scrimp on time; haste produces flawed, incomplete, and ineffective plans. More time will be wasted working on plans that are not rooted in sound planning than by following a plan in which you have invested time to develop carefully. Make use of the time between group meetings to summarize the results of group planning in documents that you will revise and elaborate as you work through the steps. The written product will be your plan, and it can serve as the basis for developing funding proposals and implementation manuals.

Acknowledgments

This document has been many years in the making. It has at its heart the notion that action research is a useful strategy for program development -- a strategy suggested by the eminent psychologist Kurt Lewin. Many of Lewin's ideas were later elaborated by Judith Blanton and Sam Alley, who used the action research idea to help groups develop program plans. Variations of these ideas were also used in the PUSH for Excellence evaluation directed by Saundra Murray Nettles and Charles Murray. Later, Gary Gottfredson suggested the incorporation of theories of action and a focus on objectives directed at the causes of problems as an integrative focus for program planning and evaluation. He, Don Rickert, Nisha Advani, and Denise Gottfredson elaborated the philosophical rationale for theories of action, provided definitions for terms used in program development and evaluation (PDE), and suggested standards for judging the quality of program development and evaluation plans. Later, Gary Gottfredson translated Kurt Lewin's ideas about analyzing the field of forces that maintain the status quo and how it can be altered for program planners and added tips on productive force-field analysis based on research in social psychology. Denise Gottfredson and her colleagues have illustrated the productive use of the PDE method in programs, as have Saundra Nettles, Barbara McHugh, and Gary Gottfredson. Gary Gottfredson has provided guidance on conducting needs assessments as part of a program development process. The references at the end of this section show where the ideas summarized in this guide have come from, and they are important resources for those who would become expert facilitators or consultants in using the PDE method.

A variety of sponsors have supported the work and thinking over many years that led to the development of the ideas and experience that made this guide possible. Among these are the Peace Corps, the national Institute for Juvenile Justice and Delinquency Prevention, the Office of Educational Research and Improvement, the National Institute of Justice, the Pew Charitable Trust, and the Center for Substance Abuse Prevention. None of these benefactors necessarily endorses this product, for which only the three individuals described next can be held to account.

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Module 1

A Framework for Action: An Overview of Program Development and Evaluation

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A Framework for Action: An Overview of Program Development and Evaluation

This module will introduce you to a method for planning, describing, and evaluating your program, the *Program Development Evaluation* (PDE) method. By using the PDE method as you develop your program, you will take advantage of a structure that will help you to make useful plans to manage the adoption and implementation of your program to determine what works, what doesn't, and why.

Why is PDE needed?

People who plan and implement programs recognize that careful planning, experimenting, and evaluation are required for program success. But in their eagerness to attack the problem that the program is to address, program staff often attempt to implement components before crucial steps have been completed. These steps include:

- Correctly understanding the nature of the undesirable condition that is to be changed by the program
- Developing and gaining acceptance for an explanation (or **theory**) of why the condition exists and ways to change it
- Designing a program that is consistent with the theory

- Using evidence about previously tested programs to select program components that will effectively eliminate or reduce the undesirable condition and generate standards for their implementation

- Developing mechanisms for providing and using information on program progress to improve the program

If the foregoing actions are not taken, the program is difficult to plan and manage, and the effects that the program produces cannot be documented persuasively.

To the extent that you can attend to all the foregoing conditions, you will be more effective at planning and managing a program. The PDE method will help you accomplish this by giving you a structured way to separate each aspect of your overall program from others, tackle one issue at a time, and put all the pieces together in a coherent whole so that you will achieve success in your overall effort.

Breaking a Big Undertaking into Smaller Pieces

The structured method you will be applying consists of the nine steps summarized in Figure 1. You will

1) use information to define the *problems* to be addressed ◊

2) specify *goals* towards which progress can be measured ◊

3) specify a set of guiding ideas or "*theory*" about what will be required to attain your goals ◊
Because this theory tells what it will take to achieve your goals, it will help you to

4) formulate the *objectives* you must reach through your efforts ◊ Usually, you will expect to see progress towards these objectives before you attain your ultimate goals.

Achieving a clear, written understanding of your objectives is a key milestone in the development of your program, because your decisions about what to do in your program should hinge on these objectives and guide you when you

5) select program components ◊ These decisions — *program design choices* — should also whenever possible be made in a way that selects program components known to be effective in achieving the objectives you have specified.

To cope with issues related to the unique culture of the specific school or school system in which your program must operate, you will

6) engage in a special activity — known as *force-field analysis* — to assess the feasibility of alternative strategies for getting your innovation adopted and implemented ◊ At this point you may also consider the relative feasibility of alternative program components directed at the same objectives.

Out of this process you will not only make your program design choices but you will also

7) develop a set of *critical benchmarks* ◊ These benchmarks are key arrangements, understandings, decisions, or events that must occur if your program is to move ahead.

If the developers of the program components you have selected have not already done so, you will also

8) specify a set of *implementation standards* ◊ These implementation standards are like "blueprints" that will help you and others in your school or school system know how well you are doing in putting the new program components in place. And, finally, you must

9) designate <u>who</u> must do <u>what</u> by <u>when</u> ◊ Clear delineation of tasks reduces ambiguity about who has responsibility for moving forward with the program.

Using Information for Program Improvement

An important part of this PDE structure is the use of information. You will use information to learn whether achieving your objectives does solve the problem, whether the program components you have selected are achieving their objectives, whether your critical benchmarks towards adoption and implementation are being met, and whether the specific program components are actually being implemented as expected.

You will devise a method for checking to see that your critical benchmarks and implementation standards are being met. This is one of the most often overlooked parts of a program (and the oversight is a main reason programs are so often ineffective). Making big improvements in educational or social outcomes is difficult, and usually much time passes before major benefits of a program are visible. Information from monitoring your benchmarks and standards serves the dual function of

(a) providing you early indicators of whether you are on track with your program or whether you need to rethink your approach to adoption and implementation and

(b) giving you and those working with you a source of satisfaction long before you can see progress in terms of your goals and objectives.

Information is only important if it is attended to and used. So the method calls for you to reassess your program periodically, and to use information to strengthen your program. Information will lead to new goals and objectives as older problems are solved or to reformulations of problems that may initially have been incorrectly perceived. It may lead to the exchange of a less useful theory for a more useful one or the exchange of a less effective program component for one that works better.

Figure 1: The 9 Steps of a PDE Plan

1	**Define the problems** What problems should your program address? What evidence implies that these are real problems?
2	**Specify goals** What are the goals your program is intended to reach? How can you *measure* each goal? How will you know if you have reached your goal? *When* do you expect to have made a substantial difference? How will you know *your program* made the difference?
3	**Elaborate a theory of action** Why do the problems occur?
4	**Define objectives** What measurable changes in behavior, attitude, or social organization must be brought about? How can you measure each objective? When do you expect to have made a substantial difference? How will you know your program made the difference?
5	**Make program design choices** What major interventions will achieve your objectives? Are there previously developed interventions which have been known to achieve your objectives?
6	**Assess feasibility and develop strategies** What resources do you have available to move forward with your program? What obstacles do you anticipate? What *strategy* or plan can move your program forward?
7	**Set critical benchmarks** What specific major changes must occur to implement your interventions and when must they occur?
8	**Spell out implementation standards** What are the specifications for your interventions? How can you know that the components of your program are being put in place as planned? How will implementation be monitored?
9	**Set tasks** Who must do what by when?

Worksheet: Program Development & Evaluation Overview

Focus Read "A Framework for Action: Overview of Program Development Evaluation." Browse through the "Glossary of Program Development Evaluation Terms."

Write Answer the following questions to explain why the PDE structure is useful in developing and evaluating your program. Refer to the module, "A Framework for Action: Overview of Program Development Evaluation" and the "Glossary of Program Development Evaluation Terms" as needed.

1. Why is it useful to spend time defining problems and setting goals before decisions are made about the components of a school improvement program?

2. How can attention to critical benchmarks and implementation standards be sources of job satisfaction for teachers and administrators in a school?

3. Experts on school improvement generally assume that it may take two to five years to make really important improvements in a school. Why does developing an effective program of improvement usually take so long?

4. What is the difference between a goal and an objective in the language of PDE?

5. Why are there so many separate elements of the PDE method?

Work as a Group

Work with your planning team for the next step. Ask one person to volunteer to read their answer to the first question above. Write the answer on a chalk board or flip chart. Working from left to right around the room, ask each member of the group in turn for any elaboration or differences in their answer. Add any elaboration or any alternative answers to the group display (chalk board or flip chart).

After all variants on the answer to the first question have been put on the group display, discuss, combine, or rewrite statements to achieve group consensus on the best answer. (Do not discuss statements until after all individual statements have been read aloud and affixed to the wall.)

Repeat the steps above for each of the remaining four questions.

Worksheet: Program Development & Evaluation Overview

Debrief Has the team gained any new insights about its planning activities as a result of examining all the parts of the PDE method? What may become easier as a result of using the method? What may become more difficult? Try to agree what elements of the entire PDE method the team has already been applying and which elements have not yet been carefully considered.

Hardly started	Some progress	Much headway	
☐	☐	☐	Assessment of the problem(s)
☐	☐	☐	Specifying measurable goals
☐	☐	☐	Explicit measures for each goal have been designated
☐	☐	☐	We have a plan for determining whether our program made a difference
☐	☐	☐	Theory of action
☐	☐	☐	Defining objectives
☐	☐	☐	Explicit measures for each objective have been designated
☐	☐	☐	We have decided when progress towards objectives should be measured
☐	☐	☐	We have a plan for determining whether our program made a difference
☐	☐	☐	Program design choices
☐	☐	☐	Analyzing the force-field and developing strategies to cope with it
☐	☐	☐	Setting critical benchmarks
☐	☐	☐	Defining implementation standards

Worksheet: Program Development & Evaluation Overview

☐ ☐ ☐ Laying out tasks

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Module 2

Formulating Problem Statements and Goal Statements

Formulating Problem Statements and Goal Statements

The first steps in developing your program are to (1) state the nature of the problems you would like to address, and (2) formulate measurable goals that correspond to your problems.

This section presents information that will assist you in the process of data-guided problem definition. This process consists of three interdependent phases:

Making sure your problems are realistic ones

Using data to assess needs

Identifying divergent views of those who have a stake ("stakeholders") in the program's outcomes

After these phases have been completed you are ready to go on to the next step, formulating measurable goals, which we consider in the last part of this section.

Making sure you problems are realistic

Many groups falter at the stage of problem definition. They bite off more than they chew by attempting to solve a problem that is beyond the scope of their resources.

Another common pitfall is confusing mission statements with problem statements. Every organization should have a mission, but mission statements are not the same as problem statements. The broad mission of your agency, for example, might be to fight poverty. However, your problem statement might read "70% of the seventh graders at Lake Wood High cannot name one source of community support."

Often groups simply lack evidence that the "problem" is a real problem. We can correct this by basing our problems on evidence of need. If the evidence does not suggest that there is a real problem, or if the problem is different from what you had imagined it to be, you can always begin the process of redefining.

The following section on needs assessment suggests strategies you can use to gather data and some resources for further information.

Needs Assessment

Every problem statement should be based on some form of needs assessment. Needs assessment can take several forms. Below we consider some of the more common forms.

1) **Social indicators.** Social indicators are statistical measures that have been collected from individuals, groups, or other units and are reported as sums ("in the aggregate"). States, local governments, and the federal government typically collect these data.

It is important to remember that use of social indicators should be geared to the location of your target population. For example, your best data to describe a problem in a given ward of your city would be the census data describing the ward.

2) **Surveys and censuses.** A survey gathers data on one part of a population to get evidence on the whole; a census gathers data on the whole population. Surveys are more common than censuses; collecting your own census data is very expensive unless the population is a small one (such as the teachers in a school or the agency directors in the school's catchment area).

   Surveys can be representative (that is, each person in the population has an equal chance of being selected) or they can be purposive (for example, using key informants, people especially selected because they have particular knowledge or expertise on the topic).

3) **Structured groups.** Focus groups (8-10 people selected to represent a population) and public hearings are examples of the use of structured groups to gather information on needs.

4) **Rates under treatment.** This is an approach in which estimates are made for your target population based on services used for a target population in a similar community or other unit. If you wanted, for example, to start an after-school program in your school, you could base your estimates for the number of students to be served using an existing program in a school with similar characteristics.

These and other methods for assessing needs are described in detail in many books on evaluation and needs analysis. Examples include Peter Rossi and Howard Freeman's (1993) book, *Evaluation — A Systematic*

Approach (published by Sage) and Jack McKillip's *Need Analysis; Tools for the Human Services and Education* (1993, Sage).

Identifying Divergent Views

The different audiences for program development and evaluation are often called "stakeholders" because they have stakes in the program and its outcomes. Some examples of stakeholders include:

- the sponsors (funders) of the intervention
- the program staff
- advisory and policy making boards (such as the school board)
- business and other community partners.

The divergent views of stakeholders should be considered an essential component of problem definition. First, not all members of an organization share the same perspective on organizational needs. Second, the views or opinions of any one person or group may be inaccurate.

A careful needs assessment therefore involves consultation with a broad range of persons likely to be in or affected by the project. Such needs assessments ideally should involve an open discussion of priorities.

Formulating Goal Statements

The program's overall aims are embodied in its goal statements. Some guidelines for formulating goal statements are as follows:

1) Specify the target group.

2) State the expected effects explicitly.

3) Be sure to state when the expected effects are to occur.

4) Include the measures that you will use.

5) Be complete; specify a goal statement for each problem statement.

Here are some examples of problem statements and their accompanying goal statements.

Problem I: 40% of the students at Lake Wood High report that they use drugs and alcohol.

Goal I: Reduce the incidence and prevalence of drug use at Lake Wood High by 1999, as measured by an annual survey of student substance use.

Problem II: 60% of the parents at Primary School report that they do not participate in school activities.

Goal II: Increase the percentage of parents at Primary School who are involved in at last two activities, as measured by an annual parent survey.

Problem III: The school district has a high school graduation rate of 55% or less.

Goal III: By the year 2001, increase by 10% each year the percentage of persons entering grade 9 who meet standards for high school graduation within six years of entry.

Worksheet: Formulating Problem Statements and Goal Statements

Focus

Read "Formulating Problem Statements and Goal Statements."

Write

Think about the problems or needs your program wants to address. Pick one of them and write a brief description on a 5 x 8 card.

Work as a Group

Working with your planning team, read all of the problems, and tape them to the wall with removable tape.

Discuss and combine or rewrite the problems if necessary.

What information implies that these are problems or needs? What new data might you need to collect?

State each problem or need in specific and quantifiable terms. Remember to use the guidelines presented in the section, "Formulating Problem Statements and Goal Statements."

- Specify the target group.
- State the expected effects explicitly.
- Include the measures that you will use.
- Be complete; specify a goal statement for each problem statement.

Worksheet: Formulating Problem Statements and Goal Statements

Problem 1:

Goal 1:

Problem 2:

Goal 2:

Problem 3:

Goal 3:

Worksheet: Formulating Problem Statements and Goal Statements

Module 3

Preparing Action Statements

Preparing Action Statements

Every program is guided by a theory — a set of ideas about what must be accomplished, what to do, and why. But, programs sometimes get off the ground before people have a chance to record these ideas. When this happens people working in the program do not all know why the program is designed as it is. Decisions — sometimes important ones — are made without regard to the rationale for the program. It is not at all uncommon to find program managers and other implementers making decisions or taking actions that are sharply at odds with the program's rationale. Usually, reflection on a program's theory can help identify components to strengthen the program and other components that can safely be abandoned altogether.

A theory of action consists of one or more propositions called **action statements.** The following provides guidelines for developing useful action statements and theories.

Guidelines

1. Think action. We have all from time to time heard educators say things like, "Our first graders do not read well because their parents don't value education." Such a statement pains the ears of educators working to help all students achieve, because it promotes inaction rather than action. It is a statement which asserts that the causes of failed achievement lie outside the scope of action of the educators making the

assertion. Such a statement does little to motivate or guide educators in improving the achievement of their students.

Contrast this statement of inaction with the following action statements:

> **"Our first grade pupils will become better readers if we get their parents'**
> **help in talking with and reading to them at home."**
>
> **"Beginning pupils will learn to read more easily if we ensure that they develop oral language skills needed for reading."**

These statement have clear implications for actions that educators can take to improve their students' achievement.

2. Avoid incorrect action statements. Some ideas about solving problems are plain wrong, and others are at least partly flawed when examined in the light of evidence. Reconsider the statement of inaction discussed earlier — that some pupils' parents do not value education. In addition to the problem of directing attention away from educators' role in promoting learning, this statement is usually objectively wrong. There are no communities in America in which the vast majority of parents do not wish educational

success for their children. Surveys and educators' personal experience both show that parents want their children to succeed in school.

When confronted with an incorrect statement, program planners can search for more valid statements with which to supplant it. For example, are any of the following statements more likely to be correct? "We have not communicated effectively with parents to ask for concrete forms of assistance." Or, "Many parents lack the resources or knowledge to help their children with reading."

3. Use "if-then" statements. Helpful action statements will be stated in if-then form, where the "if" describes outcomes under your organization's control and the "then" describes an outcome that can be realistically achieved. Here are some examples:

> **If we ask parents to read at least 120 minutes a week to our first-grade pupils, then students will learn to read at grade level.**
>
> **If 80% of the population is vaccinated against tuberculosis, then the disease will not spread.**
>
> **If we design activities students say they like, then attendance will improve.**

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4. Include as many important causes of problems as possible. Sometimes programs are based on incomplete theories. They address some of the causes of a problem but overlook important sources of influence. For instance, a middle school attendance program that assumed attendance would increase if students were monitored more closely and parents notified promptly of student absences might be based on a partial explanation of the problem of nonattendance. If daily absences run more than 2 or 3 percent, it is likely that there are multiple causes of truancy. Do students like school? Are instructional activities rewarding for students? Do any students fear for their safety? Worry about being teased or harassed by other students? Programs based on more comprehensive theories about a problem will be more effective than programs based on only one or two ideas.

Making Program Theory Work for the Program

To work for a program, the theory should be stated explicitly so that everyone knows what it is, it should include action statements rather than statements of inaction, it should be objectively correct (correspond with the best evidence available), cover as many influences on the problem as the program can address, and it should be put to work for the program to identify intervention ideas.

The program theory should be useful in producing ideas for successfully solving the problems a program will address. If it is not useful in this way, it should be re-examined.

Everyone is familiar with the "germ" theory of disease — the idea that many diseases are due to infections by microorganisms that can be spread among people by a variety of vectors including water, food, particles in the air and on surfaces, insects and other animals, and people carrying the "germs." This is a powerful theory for workers concerned with public health, because it suggests many ways to intervene to reduce the risk of disease: protecting water and food from contamination, treating water with chlorine and cooking food, having health workers wear masks and wash their hands, controlling insects and other animals, and avoiding contact with infected individuals. These steps and more are all implied by a single statement that constitutes a powerful theory.

Notice that many alternative theories are possible and that some organizations with the resources and power to do so might develop programs based on more comprehensive theories. But a plausible theory cannot be an "action theory" for every organization. The World Bank might note that poverty undermines public health and build economies to fight disease (for example, it might help entire countries develop the capacity to afford public health measures), and hospitals and physicians might treat patients based on theories of the disease process to save lives once persons are diseased (for example, they might give water and electrolytes to cholera victims to save their lives).

The important point is that your project's theory should:

- Be explicitly stated and broadly communicated;
- Be useful in stimulating and directing action;
- Correspond with objective evidence about the problem and its solution;
- Cover as many causes of the problem as can be influenced by the program; and
- Be expressed in one or more action statements in if-then form.

By attending to these criteria you will develop a theory of action that will help your program become effective.

Worksheet: Preparing Action Statements

Focus Read "Preparing Action Statements."

Write Answer the following questions to describe your program's theory.

1. Why does this problem (these problems) exist?

2. What causes of the problem(s), **which can feasibly be addressed by your program**, will guide your program?

Write action statements in the space on the following page. Remember that a theory statement should have the following features:

- ➜ Be explicitly stated and easy to communicate;
- ➜ Be useful in stimulating and directing action;
- ➜ Correspond with objective evidence about the problem and its solution; and

Worksheet: Preparing Action Statements

- ➜ Be stated in if-then form, where the "if" describes outcomes under your organization's control and the "then" describes an outcome that can be realistically achieved.

Write as many action statements as are needed.

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Worksheet: Preparing Action Statements

Revise Each action theory statement can be translated into an objective your program can achieve. Review what you have written above, and revise and regroup the statements as necessary to meet the criteria for theory statements listed above. Write your revised theory statements on 5" by 8" cards.

Worksheet: Preparing Action Statements

Work as a Group

Working with your planning team, read all the theory statements aloud one by one, and tape them to the wall with removable tape. Organize related statements together.

After all theory statements have been read aloud, discuss, combine, or rewrite action theory statements by using the criteria listed above. (Do not discuss statements until after all individual statements have been read aloud and affixed to the wall.)

Discuss the program theory by reference to the criteria listed earlier.

Agree on a final set of formal written theory statements. Write the program action theory below.

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Module 4

Setting Objectives

Setting Objectives

At this stage in your program's development, you have defined problems, established goals, and developed a theory of action. Now you must set specific objectives — measurable outcomes which are possible for your group to bring about and which must be reached according to your theory of action.

Consider the following example

> Your principal has identified the following **problem**: there are too many children in the school who are reading below grade level.
>
> Your committee, which has been set up to solve this problem, has established a **goal** of having all students read at grade level in 3 years.
>
> You have decided on a **theory** statement that if students read more, their reading achievement will improve.
>
> At this stage, you must set **objectives**, and you decide that one **objective** is to have 85% of students read at least 120 minutes each week at home.

You see from this example that at this stage you begin to narrow your focus from the broader ideas stated in your goals and theory statements to a more concrete, specific measure of immediate outcomes.

Some Rules for Stating Objectives

Objectives let you measure changes in behavior, attitudes, school climate, or school structure. Be sure to:

1. state the objectives in specific and quantifiable terms;
2. specify how you can measure each objective;
3. indicate when you expect to have made a substantial change; and
4. state how you will know your intervention made the difference.

Going back to the previous example, the statement of objective may be expanded to the following.

> Your **objective** is to have 85% of all students read at least 120 minutes each week at home by February of this school year. Parents will record how many minutes their children are reading. The **objective** will be met if 85% of students read 120 minutes each week from February to June.

Of course, your theory can suggest multiple objectives. You need not specify just one objective when there are other outcomes which you can influence. For example, returning to the action statement that if students read more, their reading achievement will improve, you might decide to add the following objective.

> By January 31, students who have been reading below grade level will read 60 minutes each week to peer tutors. The tutors will record the reading time. The objective will be met if 90% of below-grade-level students read an hour each week to peer tutors between February and June.

And, if there are multiple action statements in your theory, you should set at least one objective for each.

More Things to Remember when Setting Objectives

- An objective should be stated for each action statement.
- Objectives must be attainable, at least in principle.
- How the objective will be measured must be specified, and obtaining the necessary data must be feasible.
- The target group must be specified.
- Specifying how much of a change you expect to see provides "planning figures" against which to gauge project success.
- Stating when an objective is to occur provides a timeline for program planning and specifies when the outcome measures are to be collected.

Don't Forget about Your Evaluation Design

You will need to determine if your program achieves the objectives you set in this step. Therefore, in addition to insuring that your objective can be measured, you must set up an evaluation design that will allow you to test the effectiveness of your intervention. If you apply multiple interventions to the same target group, how will you know if and by how much each course of action has affected the group?

Let's go back to the example of the students reading below grade level. If you decide to implement both objectives, you need to devise a method of measuring the effectiveness of each. You could perhaps implement the following design.

Student Group	Implement Objective
I	Home-based reading
II	Peer reading
III	Both home-based and peer reading
IV	None

This design would allow you to test each intervention separately and to compare the results to students receiving both interventions and those receiving none. This is, of course, only one example. The research design is your creation. It will reflect your aims and priorities. Just be sure to consider it at this step. It will help you in setting your objectives and it will assist you in your next step — establishing implementation standards and measurement.

Worksheet: Setting Objectives

Focus

Read "Setting Objectives."
Review the final set of formal written action statements from your worksheet on "Preparing Action Statements."

Write

Using the following guidelines, draft at least one objective for each action statement in your theory. Write each objective on a separate 5" by 8" card.

- → State the objectives in specific and quantifiable terms.
- → Specify how you can measure each objective.
- → Indicate when you expect to have made a substantial change.
- → State how you will know your intervention made the difference.

Write as many objectives as are needed.

Work as a Group

Working with your planning team, read all the objective statements aloud one by one, and tape them to the wall with removable tape. Organize related statements together. (Do not discuss statements until <u>after</u> all individual statements have been read aloud and affixed to the wall.)

After all objectives have been read aloud, discuss, combine, or rewrite objective statements by using the criteria listed above and the additional criteria listed in "Setting Objectives."

Agree on a final set of objectives. Write the objectives on the next page.

Worksheet: Setting Objectives

Put a star next to any of the objectives with which you need technical expertise. For example, star any objective you are uncertain how to measure.

Module 5

Designing the Program

Designing the Program

In many instances, people already have an idea about what they want to do before they have a clear set of problems, goals, action statements, and objectives in view. Then they do it and decide to fill in the missing pieces later.

This puts the cart before the horse! Sometimes by chance you might get somewhere; but often your program is half way down the road before someone says, "That was a bad idea. Let's go back to square 1." When that happens, you may already have lost valuable time and money.

By the time you get to this section, we hope that you have thought about your problems, your goals, your theory of action, and your objectives. Not it's time to design the program. This section provides some guidance.

Guidelines

1) **Interventions (sometimes called program components, projects, or even programs) are focused on the target population identified in the problem statement.** Sometimes people abandon the original target population and go to those who are perceived to be easier to serve. When this happens, it must be explicitly stated in your problem statement, and evidence must be provided that the problems of the new target population indeed exist.

2) **Make sure that the component is plausibly related to the objective.** This is the time and place for you to do your homework! Go to the nearest library and search through the ERIC and Psychlit databases. Keep a notebook on effective (i.e., evaluated) strategies.

3) **Design at least one component for each objective.** Your intervention may be targeted at more than one objective, however.

4) **Implementers perceive that implementation is feasible.** It's helpful to begin the description that is designed to meet the objective as if the description were an entry in the program's implementation or replication manuals. If there are too many expectations, then you might want to rethink its feasibility.

Resources for Designing your Program

You may want to start with the following sources in designing your program.

Archer, E. & Cahill, M. (1991). Building life options: School-community collaborations for pregnancy prevention in the middle grades. Washington, DC: Academy for Educational Development. (ERIC Document Reproduction Service No. ED 339 940).

Baltimore City Public Schools. (1992). Partnership mentoring manual. Baltimore, MD: Baltimore Mentoring Institute.

Botvin, G. J. (1989). Life skills training. Teacher's manual. New York: Cornell University Medical College, Department of Public Health and Psychiatry.

Dryfoos, J. G. (1990). Adolescents at risk — Prevalence and prevention. New York: Oxford University.

Freedman, S. & Aschheim, B. (1985). Industry-education partnership guidelines. Quincy, MA: Massachusetts State Department of Education. (ERIC Document Reproduction Service No. ED 182 465).

Fruchter, N., Galletta, A., & White, J. (1992). New directions in parent involvement. Washington, DC: Academy for Educational Development.

Hamburg, B. (1990, April). Life skills training: Preventive interventions for young adolescents. Report of the Life Skills Training Working Group. Washington, DC: Carnegie Council on Adolescent Development.

Nolen, Lori. (1991). Economic development through youth: A program for schools and communities. Tallahassee, FL: Florida High Technology and Industry Council.

Rauch, S. J., & Sanacore, J. (Eds.) (1985). Handbook for the volunteer tutor. Newark, DE: International Reading Association. (ERIC Document Reproduction Service No. ED 251 817).

Rosenbaum, J. E. et al. (1992). Youth apprenticeships in America: Guidelines for building an effective system. Washington, DC: William T. Grant Foundation Commission on Youth and America's Future, 1001 Connecticut Ave., N.W., Suite 301, Washington, DC 20036-5541.

U.S. Department of Education. (1993). Summer challenge — Model summer programs for disadvantaged students. Washington, DC.

Wilson-Brenner, R., Cohen, S., O'Donnell, L., & Goodman, I. (1991). Violence prevention for young adolescents: A survey of the state of the art. Washington, DC: The Carnegie Council on Adolescent Development.

Worksheet: Designing the Program

Focus Read "Designing the Program."

Write As a planning team, agree to take one of the objectives identified in the worksheet, "Setting Objectives." As individuals use the following guidelines to describe in the space following at least one program component that you believe will meet your objective.

- → Direct the component toward the target population identified in the problem statement.
- → Make sure that the component is plausibly related to the objective.
- → Ask the question — "Is this feasible?" — after you have detailed all the elements needed to implement the component.
- → Specify who must do what, by when.

Target population:
Objective to be addressed:
Preliminary estimate of feasibility:
Who must do what to get this off the ground:

Worksheet: Designing the Program

Work as a Group

Working with your planning team, read each of the program components aloud. Write each component and the accompanying notes on a chalk board or a flip chart.

Discuss the program components by referring to the guidelines above.

Module 6

Implementation Standards

Implementation Standards

After you've written a clear set of **objectives** and chosen a course of action (the **program design**) to achieve the objectives, then you must prepare detailed specifications (**standards**) for implementing these designs.

Implementation is what your organization **does** to put your program in place. It is the what, how, when, where, with what, how often, and to whom of your program. Implementation standards are like blueprints. They describe in detail what people must do to bring about an intervention. Implementation standards should spell out your plans for managing the quality, quantity, and timing of a program. Standards must be established to clearly define:

- what the intervention consists of
- when the intervention is to begin
- how long the intervention will last
- to whom the intervention is to be applied
- how often it is to be applied
- under what conditions the intervention is to be applied
- who will perform the intervention
- how, specifically, the intervention is to be delivered.

The document spelling out implementation standards for a social or educational program often takes the form of a manual specifying the steps to be taken and resources needed to enact the program. Following are some of the things that you would expect to find in such a manual or set of implementation standards:

- materials needed;
- procedures to be followed;
- advance preparations required;
- schedules;
- wrap-up or follow-up activity;
- behavior to be displayed by those delivering the information; and
- personnel skills, training, or credentials needed.

Examples

Following are examples of some of the implementation standards which have been developed for a career development intervention.

95% of 8th graders must complete all of the following by April 10:

--> the "Self-Directed Search" (a self-scored interest inventory)

--> "What is Important to Me" (a self-scored survey of work values)

--> At least six Occupational Exploration Worksheets, at least 3 of which are for occupations matching their highest interest scores

--> At least 8 arguments for and 8 arguments against each of their two most favored career alternatives.

This partial list shows that even a relatively simple intervention might involve many standards. Notice that particular interest inventories are specified, the number of certain activities is determined, and the content of lessons is stipulated. The list also contains a when specification — all this has to be done by April 10 to provide high school guidance personnel the time and the information to assist 8th graders in determining their 9th grade curriculum.

Monitoring of Implementation Standards

Monitoring of implementation standards should become a routine part of your management of your intervention. For each implementation standard, an information-gathering mechanism must be identified or created which will measure how well a standard is being met. Some mechanism may already exist. For example, the school or the district may already have procedures and forms in place for gauging how closely a teacher follows a prepared curriculum. Or archival data, such as orders for materials or memoranda from meetings, may provide you with valuable information. Other sources might include:

- logs and checklists,
- observations,
- workbooks completed,
- interviews, and
- questionnaires

After monitoring procedures have been identified or created, a specific individual should be given the authority and the responsibility to maintain the checklists, perform the observations or interviews, or do whatever is necessary to methodically collect information which will document how well a program is being implemented.

The When of Implementation Monitoring

Some standards may be easily measured and information can be collected on a daily basis. Other standards are more difficult to measure and can only be monitored on a less frequent basis. Your determination of the frequency and the timing of data collection will, therefore, be based on the nature of the implementation. In most cases, however, we recommend that a formal review of each standard be made by the committee on a monthly basis. This will allow you to determine if information is actually being collected, and will provide you with on-going information about the implementation of your program.

Some "Rules" for Writing Implementation Standards

1) Implementation standards should be specific enough to allow for comparisons of what is being done with what was intended.

2) Implementation standards for each part of the intervention are essential.

3) Implementation standards must be specific, observable, and recurrently monitored.

4) Implementation standards are needed to specify and monitor the extent to which sufficient time is being devoted to the required activities.

5) If special skills or competencies are required by the school staff, implementation standards must be created to determine whether the staff actually has these skills or competencies

Why are Implementation Standards Important?

Implementation standards are important because they provide a gauge against which to compare intended and actual program delivery. Information about the extent to which your intervention is meeting standards, exceeding them, or falling short of meeting them is critical to program management and development. Without standards you have no basis, other than personal opinion, for judging the adequacy of implementation.

Without measures of program implementation you will not be able to interpret a negative outcome. If your program fails to achieve its objectives, you must be able to determine whether it was because the program was not fully implemented or because the program — although well implemented — did not produce the outcomes that it was intended to produce.

Implementation standards are also important because they provide a basis for replication of your program. They provide a model which can be used in future staff training and program management, both within the school and within the district.

Module 6

Implementation Standards

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Worksheet: Implementation Standards

Focus

Read "Implementation Standards."

Work as a Group

Pick one of the components you identified in the worksheet, "Designing the Program." Use the following headings as a guide for developing a **preliminary** set of standards for the component you've chosen.

Brief description of the program component

Target population

When the program component is to begin

How long the program component will last

How many people will conduct or participate in the activities

Expectations for the quality of the activities

What each performer is to do

using what materials,

and **how often**

Worksheet: Implementation Standards

Put the headings and your answers on a flip chart for later use.

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Module 7

Analyzing the Force Field

Analyzing the Force-Field

The status quo is maintained by a balance of forces, some restraining against movement in the desired direction. To conduct an analysis of these forces (a force-field analysis), it is necessary to have a clear understanding of the direction in which the organization wishes to move — the nature of the desired state of affairs. To move an established status quo in a desired direction it is useful to reduce the influence of restraining forces — or to change their direction. The force-field is best analyzed by the group of persons experiencing the forces — including the persons making decisions and those affected by the changes to be made. Effective problem solving involving a change in the status quo usually requires consensual public commitment to a goal by members of the group. Commitment to a goal is unlikely unless a feasible path to its achievement is perceived by all members of the group. Commitment to a goal is not always objectively correct, but they nevertheless constrain action just as do any other elements of the force-field. Standards for performance, feedback, and the expectation of follow-up enhance action directed towards the goal.

Guidelines

1) **To conduct an analysis of these forces (a force-field analysis), it is necessary to have a clear understanding of the direction in which the organization wishes to move — the nature of the desired state of affairs.**

Force-field analysis is useful for discovering what is anchoring an organization or program in place and what resources and obstacles may exist for moving in a certain direction. But it is not a method that is of much value in determining what the direction or nature of change should be. That function is served by *needs assessment*, a topic which has been covered elsewhere. Therefore, force-field analysis presupposes as a starting point a clear idea about the changes or innovations that are desirable.

Force-field analysis is often a useful adjunct to needs assessment, however, because there are usually several alternative program design choices that would meet the objectives identified in the risk assessment phase of needs assessment. Some of these alternatives may be more feasible than others, and force-field analysis can often reveal that a choice initially regarded as infeasible is in fact feasible or that a choice regarded as feasible is burdened by previously unanticipated obstacles.

2. To move an established status quo in a desired direction it is useful to reduce the influence of restraining forces — or to change their direction.

Because the balance of forces is what maintains the state of quasi equilibrium, that balance must be altered to change the status quo. One approach to change that is often attempted is to increase the strength of the forces impelling in the desired direction. By itself, this is generally a flawed method. In many social organization, the strength of forces resisting a shift in the status quo increases the greater the deviation from the status quo becomes. What often occurs when an attempt is made to apply new or greater forces to alter an existing equilibrium is increased tension, just as tension increases when one exerts force against a coiled spring.

To change the status quo, it is usually more effective to render existing restraining forces irrelevant, to diminish their force, or to change the direction of their force.

3. The force-field is best analyzed with the help of the group of persons experiencing the forces — including persons making the decisions and those affected by the changes to be made.

To achieve social change, it is the psychology of the persons whose behavior must be altered that is most important. Accordingly, it is important to analyze the force-field as it is perceived by these actors. Very often, these persons share a common set of perceptions or understandings of the force-field that are objectively incorrect. For example, it is a common experience for a change agent to discover that most or all members of a group hold incorrect beliefs about laws, regulations, or policies — and these incorrect beliefs restrain against moving in the desired direction. Simply asking, "who made that rule?" or "who established that policy?" can upon quick investigation lead to the conclusion that there is no such rule except in the beliefs of those constrained by it. A similar phenomenon (known as "pluralistic ignorance") occurs when members of a group have incorrect perceptions of the views of others, and these incorrect perceptions restrain against change in the status quo.

Even in the realm of "objectively correct" perceptions, it is again those who are themselves concerned with the force-field who are in the best position to identify the forces operating on their behavior.

A *group* who will be involved in implementing the change should be involved in analyzing the force-field, because the psychology of groups is different in important ways from the psychology of individuals. Attempts to change the opinions or intentions of individuals either through lecture presentations or through individual persuasion both approach the individual in the context of his or her private

thoughts and perceptions. Yet we know that individuals are very likely to conform to their perceptions of the expectations of others in their social group. Furthermore, we know that individuals tend to seek information from and be more susceptible to influence by others whom they perceived as similar to themselves.

4. Commitment to a goal is unlikely unless a feasible path to its achievement is perceived by all members of the group. Perceptions are not always objectively correct, but they nevertheless constrain action just as do any other elements of the force-field.

An aim of force-field analysis is to learn about the perceptions of members of the group who will maintain the status quo or make change possible. As noted earlier, it is the force-field as perceived by these decision makers that maintains the equilibrium. Analysis of the force field must attest not only to the hindrances and facilitating factors that *are* perceived, but also to factors which are *not* perceived. Often, mobilization towards change is stifled by perceptions or beliefs that are held in common and go unquestioned by all members of an organization, but that can yield to alternative perceptions or interpretations if approached creatively.

Figure 1 illustrates a situation in which a person perceives no way to get to goal 2, and so cannot choose to pursue that goal. Figure 2 illustrates how the person can be free to pursue goal 2 once certain unperceived elements of a path to that goal are revealed. Revealing such possibilities is one of the purposes of force field analysis in planning and problem solving.

The psychology of the group is different once a new path towards a goal has been perceived; changes in mood or attitude, and in the level of enthusiasm about change can be quite evident.

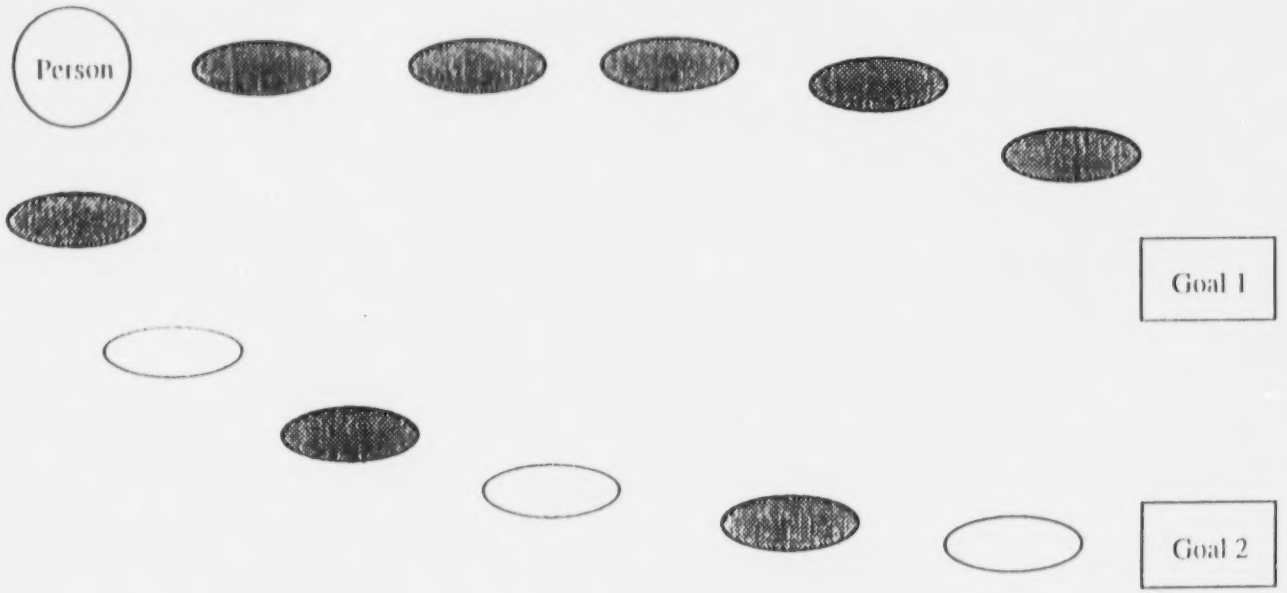
Figure 1.

A Person is Likely to Pursue a Goal
Only If a Path to It is Perceived

The person is unlikely to pursue goal 2.

Figure 2.

A Person is Likely to Pursue a Goal
Only If a Path to It is Perceived



When the person perceives previously unperceived parts of a path, the person is more likely to pursue goal 2.

Revealing the nature of the force-field, possible errors in its perception, and the availability of a path previously unperceived are tools for "unfreezing" group custom or breaking a social habit. Plans made on the basis of the new perceptions can then be implemented to "refreeze" a new status quo by altering the force-field permanently.

6. Standards for performance, feedback, and the expectation of follow-up enhance action directed towards the goal.

> People responsible for social management are frequently deprived of their legitimate desire for reconnaissance on a realistic basis. Under these circumstances, satisfaction or dissatisfaction with achievement becomes mainly a question of temperament.... In a field that lacks objective standards of achievement, no learning can take place. If we cannot judge whether an action has led forward or backward, if we have no criteria for evaluating the relation between effort and achievement, there is nothing to prevent us from coming to the wrong conclusions and encouraging the wrong work habits.[1]

Planning should include the specification of concrete, observable standards for performance, benchmarks of progress, and measurable objectives and goals. This enables feedback on performance to be assessed in comparison with these standards, benchmarks, objectives, and goals. Goal setting without feedback, and feedback without goal setting are both unlikely to produce the same degree of effort towards change as the combination of goals and provision for feedback. As an important recent review of the research on motivation put it, "Goal setting without feedback appears to have little long-term effect on performance....[And] without a goal or standard, people do not appraise feedback as significant and thus do not take action in response to it."[2]

1 Lewin, K. (1947). Group decision and social change. In T. M. Newcomb & E. L. Hartley (Eds.), *Readings in social psychology*. NY: Holt, p.334.

2 Locke, E. A. & Latham, G. P. (1990). Work motivation and satisfaction: Light at the end of the tunnel. *Psychological Science*, 1, 240-246.

Worksheet: Analyzing the Force-Field

Focus

Read "Analyzing the Force-Field."

Get Ready

Here are the steps for conducting a force-field analysis. Each step is explained following the list. Before taking these steps, your group should have a clear idea of the change you wish to bring about.

1. Identify obstacles — the restraining forces.
2. Determine which obstacles are most important. List obstacles in order of priority.
3. Identify resources — the enabling forces.
4. Develop a general strategy — a plan to overcome resistance to change. Get consensual public commitment to the strategy.
5. Specify critical benchmarks — observable signals of changes in the force-field.

The following explains how to carry out each step. It is important that the person leading the group in a force-field analysis execute these steps in this order, or have a very good reason for deviating.

Worksheet: Analyzing the Force-Field

Identify Obstacles

First, working with the entire team, use a flip-chart to make a comprehensive list of obstacles to moving in the desired direction. Do not attempt to resolve these obstacles at this time. Set aside all discussion of ways to circumvent obstacles until later. (It may be useful to note ideas about resources on a sheet of paper that is covered by the obstacle sheet.) When a group member begins to discuss a resource, say, "That is a resource. We are working on obstacles now." The task at this stage is to produce a complete list of every important obstacle. (You can add others to the list later, but try to be as complete as possible at this point.)

Use verbal rewards for on-task behavior. Each time a group member offers an obstacle say, "Thanks" or "Good, that's another one." Write each obstacle on the flip chart legibly, incorporating your own or any other group member's clarifying language. Writing on the chart concretely reinforces on-task behavior, and it keeps the contribution public so that it can be observed and recalled by all members of the group.

Encourage honesty. One important obstacle that groups often fail to discuss is their own attitudes about the project to be undertaken. If one or more group members has reservations about the desirability of moving forward, include that in the list of obstacles. Try to determine the nature of the reservation.

Propose some common categories of obstacles if they are not being produced by the group. Ask the following questions to generate information if information is not offered:

- "Is there enough money to do this?"
- "Does anyone not want us to do this?"
- "Would any individuals or groups oppose us if it appeared that we would move ahead with this?"
- "Is everyone here convinced that it is a good idea to move ahead with this?"
- "Are there any rules, regulations, policies, or laws that would make this difficult?"
- "Are there any other forces from within our organization that will restrain us from doing this?"
- "Are there any other forces from outside our agency (sources of money, sponsors, clients, constituencies, regulators) that will restrain us from doing this?"

➔ "Why hasn't this change occurred already?"

Attempt to be exhaustive. It is time to quit eliciting obstacles only when the group can generate no more, or the obstacles listed are so trivial that it is obvious they can be overcome easily, or they generate laughter.

Identify the Most Important Obstacles

Decide through group discussion which of the obstacles is most important, next most important, and so forth. Number the elements of your list accordingly. In most instances, a satisfactory plan for change can be devised and most group members will become committed to the plan if the one to three most important obstacles can be coped with. It is rarely necessary to discuss all the obstacles identified.

Identify Resources

Shift from obstacle-finding mode to problem-solving mode. Whereas in the previous steps you were concerned with listing obstacles and that identifying forces working against the desired change was competent role behavior, now you must find ways to overcome these obstacles.

It is generally better to find a way to render an obstacle irrelevant, to diminish its force, or to change its direction than to attempt to overcome an obstacle by applying counter force.

Worksheet: Analyzing the Force-Field

Start with the most important obstacle and a fresh sheet of flip -paper. Encourage group production of ideas about ways to get around this first obstacle. What resources (money, interpersonal influence, prestige, authority, personnel) can you apply to overcome this obstacle.

Orally reinforce contributions. Write each idea about a new resource that can be applied on the flip chart as a means of rewarding on-task behavior, to ensure that all contributions are public, and so that no idea is lost.

Suggest potential resources that group members may not themselves suggest (because they are captives of "pluralistic ignorance" or "social habit"). For example, ask, "Is there really a written state regulation making this impossible?" "Will the person(s) with decision-making authority make funds for this available?" Remember that many of the restraints that an organization's members have long assumed are due to rules, regulations, policies, or laws may not in fact be such. Similarly, ask "Who made that policy? Could that individual change the policy? What would it take to get so-and-so to change the policy?"

Never argue about a matter of fact. Get the correct information whenever uncertainty or disagreement exists. In most cases, a phone call to a person with the relevant factual information should be made immediately during the meeting. Send an individual from the room to make a phone call or to get a pertinent document, or use an assistant to do so. Pursue another idea while waiting for the factual information.

For each important obstacle, one at a time, ask what could change the direction of this element of the force-field. Can, by adopting a more fundamental perspective or by appealing to an overarching point of agreement, this force be made to work for change in the desired direction rather than against it?

When one or several seemingly good ideas for coping with the first obstacle have been generated, move on to another obstacle.

Usually, it is not necessary to be exhaustive in discovering resources. It is often useful to determine the general nature of the range of impelling forces, however, because this information can be useful in

Develop a Strategy

reversing the direction of restraining forces by reference to common aims of the planned change and the individuals or groups who currently resist change.

At some point, a *strategy* for applying resources to overcoming the most important obstacles should emerge. Psychologically, the members of the groups will perceive steps to attain the goal that had not previously been perceived (remember Figures 1 and 2). At this point try to formulate a general strategy or plan in words through group discussion. Usually, a few sentences can capture the essence of a strategy.

Write the strategy on the flip chart.

Seek consensus and public commitment from all group members. If the force-field analysis exercise has been successful, the mood and attitude of the group will often be quite different from that prevailing when the exercise was begun — sometimes elation prevails. Test for success by asking each person, "Do you think this strategy will work?" Everyone should reply with a "yes" or "it has a good chance of working."

Very important: If there is not general agreement that the strategy is feasible and desirable at this point, the group should either (a) continue with the consideration of resources until an attractive plan emerges or (b) reconsider the change it intends to introduce to select an alternative that is more feasible given available resources.

Specify Critical Benchmarks

A critical benchmark is an *observable* decision, arrangement, agreement, or change in resources that alters the balance of forces in the force-field.

List the critical benchmarks — the key decisions, arrangements, agreements, or personnel changes that are required to move forward with the strategy — on a flip chart.

For each critical benchmark indicate *what* observable change occurs, *who* the primary person for ensuring the achievement of this benchmark shall be, and *when* the benchmark must be observed to signal satisfactory progress with the plan.

The list of critical benchmarks for implementing the strategy serve to:

(a) indicate in an objective manner what is expected to be accomplished by specific individuals,
(b) provide feedback signaling progress in implementing the strategy,
(c) provide warning signals that the strategy may not work (if benchmarks are not being met), and
(d) provide for the anticipation of follow-up on implementation of the plan (a motivational tool).

The plan incorporating a summary statement describing the strategy and a complete list of critical benchmarks, complete with observable benchmark statements, specification of a person responsible for achieving each, and a date for completion should be reproduced and made available to all members of the group. Monitoring and followup on this plan is essential.

Important: When monitoring of progress indicates that critical benchmarks are not being met, the group should reconsider its force-field analysis and devise an alternative strategy.

Glossary

Of Program Development Evaluation Terms

Glossary of Program Development Evaluation Terms

Action statement	A proposition in your program's theory of action. A statement explaining one of the causes of the problem your program is designed to address.
Adoption	The acceptance and use of a developed program, intervention, or set of interventions.
Comparison group	A group of individuals, schools, etc., with which a group receiving some intervention is compared to help learn about the effects of the intervention. Equivalent comparison groups (i.e., groups where no pre-existing differences are present) are preferred to comparison groups known to be non-equivalent, and equivalence is best achieved through randomization (see randomization).
Control group	A group of individuals, schools, etc., with which a treatment group is compared, and which is known to be equivalent. Control groups should be created through randomization when possible.

Critical benchmark	A key decision, agreement, action, or arrangement necessary to move forward with a strategy or plan. If a benchmark is not met, progress in executing the strategy is blocked. When a benchmark is met, the force-field changes. A benchmark statement tells what change in the force-field must occur by when.
Design decision	The choice of interventions that occurs at or near the end of the initial planning phase of project development. Design decisions should be reconsidered periodically using information about the decision's outcomes.
Evaluation	Activity to determine what happened, why, and with what effect. Evaluation determines whether project activities produced any outcomes of importance; whether unintended as well as intended outcomes were produced. Evaluation subsumes both formative and summative evaluation.
Experiment	An experiment is activity undertaken deliberately to examine the consequences of an intervention. The term experiment is often used to refer to true experiments, involving randomization (see randomization, true experiment).
Feasibility	The likelihood that an intervention can be implemented as intended.
Force-field	The social-psychological field that immediately surrounds a decision or action. It includes the forces that compel or restrain against alternative

	actions. Organizations are held in place (do not change) because forces are in equilibrium. To create change, the balance of perceived or actual forces must be changed.
Formative evaluation	Activity undertaken during the course of a project evaluation to foster project development by determining what is being implemented, by whom, with what effect, and how effectiveness may be enhanced.
Goal(s)	What an organization is trying to achieve. A goal generally is the obverse of a problem; it specifies how the goal (or the level of the problem) may be measured. Goals are not broad or general aims. Such broad or general aims may be called missions.
Implementation	The execution of an intervention. Interventions vary in the extent to which they are implemented as anticipated or planned.
Implementation manual	A blueprint for the implementation or replication manual of an intervention or set of interventions (i.e., program model). Such a manual includes a statement of (a) what the intervention is intended to achieve, (b) the theory underlying the intervention, (c) the resources required for implementation, (d) the training and personnel required, (e) detailed specification of the intervention, (f) implementation standards, (g) all forms and record keeping procedures required to operate and evaluate the intervention.

Implementation standards	A clear statement of indicators of faithful implementation (fidelity and completeness) of an intervention. Specifications or blueprints for an intervention define the implementation standards for the intervention.
Integrity	The extent to which an intervention is carried out according to specifications.
Institutionalization	Institutionalization occurs when an activity becomes routinized and part of the status quo in an organization. When an activity is institutionalized, more effort is required to terminate it or substantially modify it than is required to continue it.
Intervention	Activity undertaken to achieve an objective. Intervention is often synonymous with the word "treatment."
Management information system	A tool used in formative and summative evaluation information to provide information about plans, strategies, system resources, obstacles, adoption, implementation, and outcomes.
Management plan	A plan for implementing an intervention or set of interventions. A management plan is composed of strategies for adoption of innovations (see strategies) and of standards for the implementation (see implementation standards).
Mission	An organization's broad or general aims.

Needs assessment	Activity intended to specify or clarify goals or objectives.
Objective(s)	An outcome that a project's theory of action implies must occur to achieve a goal. Objectives (intermediary outcomes) are stated in measurable terms. Ideally, a statement of an objective will specify when an objective will be achieved and how much improvement should occur as well as specifying how it is to be measured.
Obstacle(s)	Forces which hold the project back, impede the progress of a plan, or move the organization or individual in a direction opposite the intended direction. Obstacles may be perceived when none exists, or obstacles may exist but not be perceived.
Organizational diagnosis	Activity designed to assess the current status of an organization and the relations among its elements. Organizational diagnosis may include any of the following activities: (a) climate assessment, (b) assessment of goal confluence, (c) assessment of authority and decision structures, (d) assessment of communication and interpersonal relations, and (e) assessment of the match between goals and activities. Diagnosis attempts to interpret the interaction among the above elements at a point in time.
Powerful evaluation	An evaluation with sufficiently sensitive measures, adequate sample size, and with a design making the detection of intervention effects likely. Evaluations differ in power, and an evaluation lacking in power has a low probability of demonstrating anything conclusively.

Program Development Evaluation	A theory-ridden method of action research involving goal specification, theory elaboration, objective development, intervention definition, force-field analysis, the development of management plans, and evaluation research. PDE is intended to result in an upward spiral of activity leading to greater organizational effectiveness in accomplishing its goals.
Randomization	A procedure employed to ensure that treatment and control groups are equivalent except insofar as differences arise by chance. Randomization serves to rule out rival hypotheses about the sources of differences observed between treatment and control groups, and so leads to more rigorous evaluations. Because the technical meaning of randomization is not widely understood, randomization is best accomplished by experienced research personnel.
Resource	Any tool or force that furthers the adoption of an innovation, implementation of an intervention, or the achievement of a goal or objective. A resource may be a person, institution, physical or psychological force, information, money, or expertise. Both perceived and unperceived resources may exist.
Rigorous evaluation	An evaluation in which one may have confidence in the inferences drawn about the consequences of a demonstrably implemented and well-described set of interventions.
Strategies	Plans. Strategies are developed from a force-field analysis. An executable strategy will appear workable to those who must execute it, and will make

	use of an organization's resources to overcome the obstacles to adoption and implementation. Strategies are composed of two kinds of elements: critical benchmarks and tasks.
Strong intervention	An intervention implied by a plausible theory or an intervention that closely replicates an intervention that has been found effective in the past.
Task(s)	The part of a strategy that specifies who will do what by when.
Theory	A statement of why a problem exists or of how an organization may achieve a goal. A project's theory of action serves as a template for choosing and assessing interventions.
True experiment	An experiment involving the random assignment of units (people, schools, classrooms, etc.) to two or more treatments (one of which is often a non-intervention treatment, or control condition).